

surface of each waterfall being only about 2 feet below the road. We noticed a number of small fish endeavouring to jump up through the sluices in their efforts to get upstream, many of them missing the sluices, which were about two feet wide, and striking the masonry at the side. We sat down on the edge of the causeway to watch them and then noticed a few big fish of several pounds weight moving in the water below, but these did not then appear to be making any efforts to surmount the waterfalls. One fish of about half a pound, however, actually struck the ankles of one of the party in his jump. Shortly afterwards a fine fish of 8 lbs. weight jumped clean on to the causeway and was secured after an exciting moment or so with the aid of the coat of one of the members of the party! He proved to be a fine specimen of "*Labeo fimbriatus*," and I give the measurements and particulars below as he appears to be of unusual size according to 'Day' (F. B. I., Fishes, Vol. I, p. 258) who states that this fish only grows as a rule up to a foot and a half in length.

Weight 8 lbs; length 27"; girth $17\frac{1}{2}$ "; head $4\frac{1}{4}$ "; tail 6";

Scales. Lateral Line 44; 6 rows between L. l. and Ventral fin.

Dorsal fin 20 spines; anal 7; caudal 19;

2 small barbels on upper lip and 2 very minute on snout. Tail deeply forked, and the soft pad of the snout was spotted with small globules or pores.

I do not think there can be any doubt as to the fish being a specimen of *Labeo fimbriatus* as this is the only *Labeo* known in these parts having more than 15 spines in the dorsal fin or more than 40 scales in the Lateral line.

W. B. TREVENEN.

POONA, September 3rd, 1923.

No. XIX.—A NOTE ON SOME DISCREPANCIES IN FAUNA OF BRITISH INDIA, BUTTERFLIES.

When engaged in rearranging the collections of the Rhopalocera in the Forest Research Institute obtained from the following sources:—

Mr. P. Mackinnon (Mussoorie), Major Burn (Burma and Assam), Mr. A. E. Osmaston, I.F.S. (Naini Tal and Kumaon). Mr. T. R. D. Bell, I.F.S. (Karwar, Bombay) and Mr. O. C. Ollenbach (Dehra Dun).

The work by Col. Bingham was largely used, and I have noticed that the keys to the genera do not tally in all cases with the characters given for the species belonging thereto, as will be seen below:—

Keys as given in Fauna of British India. Characters actually found.

Vol. 1.

SATYRINÆ, p. 49.

b2 YYPHTIMA.

Vs. 10 and 11 of forewing not free;

Vs. 8-11 branching from 7.

In *Y. huebneri*, *Y. indica*,

Y. asterope, and *Y. nareda* vein

11 Starts from cell, veins 8-10 branching from V. 7.

In *Y. sakra* VII and V.7 spring from upper apex of cell.

NYPHALINÆ, p. 204.

B-a cell of both fore and hind wing closed. In some specimens of *Cyrestis nivea* cells are not closed.

DOPHILA, p. 205.

B-a5 Hindwing, veins 3 and 4 from lower apex of cell. In *Dophila patala* veins 3 and 4 stalked and not from lower apex of cell.

b4 Forewing, veins 3 and 4 from lower apex of cell.

AUZAKIA, p. 205.

- b5 Hindwing, veins 3 and 4 stalked Forewing veins 3 and 4 in some of
branching beyond lower apex of cell. examples of *Auzakia danava* stalked.
Hindwing, veins 3 and 4 not stalked
in some examples of *A. danava* and
constantly non-stalked in *Cyrestis*
cocles, and *Kallima* sp.

P. 206.

- B-b-b'-a4—Eyes hairy.... LIMINITIS. In *Liminitis trivena* eyes are not
hairy.*

JUNONIA, p. 207 B.d.

- Cell of both fore and hind wing open In some examples of *J. alites* and *J.*
iphita cell of forewing closed.

SEPHISA, p. 207, B-d-b1

- Forewing, vein 10 out of 7, not In *Sephisa chandra* vein 10 comes out
free. Vol. II. of the sub-costal.

PAPILIO, p. 11.

A--b-a3.

- No conspicuous blue or green col- The forewing of *Papilio telarchus*
ouring or markings on upper is richly glossed with blue.
side of wings.

PIERIDAE, p. 136.

- A-B-a6 Hindwing: precostal vein pre- Precostal vein in *Catopsilia* very
sent. rudimentary or absent.

TERIAS, p. 137.

- b6. Hindwing: precostal vein ab- In *Terias* it is less prominent, but
sent. not wholly absent.

GONOPTERYX p. 137.

- A. 7. Hindwing, termen more or less Hindwing, termen.....angulated
acutely angulated at apex of vein 4.. at apex of vein 3.
(This is probably a printer's error.)

COLIAS, p. 137.

- b5. Forewing: vein 10 emitted Forewing vein 10 in some examples of
from vein 7. *Colias glycia* starts from cell.

LYCENINAE, p. 305.

- A-a. Forewing: vein 11 anasto- Forewing V.7 not anastomosed with
mosed with V. 12. V.12 in *Zizera*.

CASTALIUS, p. 307.

- B. b2—eyes not hairy. In *C. ethion*, *C. roxus*, and *C. decida*
eyes are covered with fine hairs.

- B a1—Veins 11 and 12 anastomosed. Veins 11 and 12 not anastomosed
in *Tarucus*.

It will be seen that it is in the neuration that the anomalies chiefly exist, and in this connection attention may be drawn to the paper by Nathan Banks in the May number of the "Canadian Entomologist" of 1922 on the venational variation in *Raphidia*. He also notes that the wings were found in some cases to be asymmetrical in neuration and similar asymmetry has been noticed in some examples of *Rhopalocera* that have been examined by me.

FOREST RESEARCH INSTITUTE,
DEHRA DUN, March 1923.

S. N. CHATTERJEE,
Assistant to Systematic Entomologist.

* In the specific table on p. 294 Col. Bingham states that *L. trivena* and *L. ligyes* have non hairy eyes. The latter species has not been seen by me.